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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/419,439	10/15/1999	THOMAS D. HARTNETT	RA-5274	1274

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EXAMINER

WOOD, WILLIAM H

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/419,439

Applicant(s)

HARTNETT ET AL.

Examiner

William H. Wood

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 11 and 19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 11 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-10, 12-18 and 20-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 1-22 are pending in the application.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 are rejected under 35 U.S.C. 102(b) as being anticipated by Schroter (USPN 6,338,133).

In regard to claim 1, Schroter disclosed the following limitations:

- i) *for use in a data processing system having an instruction processor to execute instructions included in the instruction set of the instruction processor (column 3, lines 16-20)*
- ii) *the instruction processor having an instruction pipeline capable of initiating simultaneous execution on a variable number of the instructions in a predetermined period of time (simultaneous execution in a predetermined period of time is inherent to the operation of a pipeline system)*
- iii) *a system for programmably controlling the variable number of the instructions beginning execution within the instruction pipeline during the predetermined period of time (column 3, lines 25-40; the execution units are the pipeline and the*

threshold level is the method of controlling a variable number of the instructions executing)

iv) *a first storage device to receive and to store a programmable count value indicative of a predetermined number of instructions* (column 3, lines 32-34; indicates some device must store the settable threshold level)

v) *a logic sequencer coupled to the first storage device to receive the programmable count value* (inherent in the fact that some device is controlling the instructions that the threshold allows execution on, this would be the sequencer)

vi) *sequencer, in response to the count value, to generate a pipeline control signal ... to cause the instruction pipeline to receive and to initiate concurrent execution on the predetermined number of the instructions in the predetermined period of time* (column 3, lines 25-40; some device is controlling the instructions that the threshold allows execution on, this would be the sequencer)

In regard to claims 11 and 19, the scope of limitation is the same as for the above claim 1 and as such the claims 11 and 19 are rejected in the same manner as claim 1.

### ***Allowable Subject Matter***

3. Claims 2-10, 12-18 and 20-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Examiner's Response***

3. Applicant's arguments filed 21 January 2003 have been fully considered but they are not persuasive. Applicant argues: 1) Schroter does not disclose controlling the number of instructions being concurrently executed within a pipeline; 2) Schroter at most is controlling the number of instructions waiting for a single pipeline stage; and 3) Schroter does not disclose controlling execution of a number of instructions in a predetermined period of time. Examiner disagrees. First, the queue controls how many instructions enter the execution units (a form of a pipeline) by the very simple fact that it could be set to zero. Further along this point, the queue indirectly controls how many instructions are moving through the larger pipeline environment (once the queues are full the pipeline line cannot continue). Also, Applicant argues (page 3, line 9) Schroter is not *a/ways* dispatch an instruction immediately. However, this is not in the claim language and further it indicates that Applicant agrees that Schroter is at least sometimes performing this limitation, which would necessarily make the broad claims read upon Schroter. Second, as indicated above the execution units can be thought of as pipelines with multiple stages. Third, if the threshold is set to 1 (a number of instructions), however long it takes for that instruction to progress is the predetermined amount of time. As such, the broadest reasonable interpretation of the claims still read upon the Schroter reference.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (703)305-3305. The examiner can normally be reached 7:30am - 5:00pm Monday thru Thursday and 7:30am - 4:00pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7239 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

William H. Wood  
February 24, 2003

  
**KAKALI CHAKI**  
**SUPERVISORY PATENT EXAMINER**  
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